Election Systems & Software
EVS 6.3.0.2
Accessibility, Usability, and Privacy Test Report
for
California Secretary of State

CAF-ESS22006-AUPTR-01

Vendor Name	*Election Systems and Software (ES&S)*
Vendor System	*EVS 6.3.0.2*

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Accredited by the Election Assistance Commission (EAC) for VSTL status.

Revision History

Date	Release	Author	Revisions
11/30/2022	1.0	M. Santos	Initial Release

Disclaimer

The Certification Test results reported herein must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Results herein relate only to the items tested.

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The tests referenced in this document were performed in a controlled environment using specific systems and data sets; results are related to the specific items tested. Actual results in other environments may vary.

Opinions and Interpretations

There are no SLI opinions or interpretations included in this report.

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Introduction

SLI Compliance is submitting this test report as a summary of the certification testing efforts for the **Election Systems & Software EVS 6.3.0.2** (**ES&S EVS 6.3.0.2**) voting system. The purpose of this document is to provide an overview of the Accessibility, Usability, and Privacy certification testing effort and the findings of the testing effort for the **ES&S EVS 6.3.0.2** voting system's DS300 optical ballot counter and ExpressVote HW2.1 ballot marking device components.

References

California Voting System Standards (CVSS)

System Overview

Voting System Scope

This section provides a description of the **ES&S EVS 6.3.0.2** voting system components utilized for Accessibility, Usability, and Privacy testing:

- One ExpressVote HW2.1 ballot marking device, in a kiosk
- One ExpressVote HW2.1 ballot marking device, on a table
- One DS300 optical ballot counter with ballot container

The **ES&S EVS 6.3.0.2** ExpressVote HW2.1 is a ballot marking device used to assist voters with marking ballots.. These ballots are later scanned and tabulated by the DS300.

The **ES&S EVS 6.3.0.2** DS300 system employs a precinct-level optical scan ballot counter (tabulator) in conjunction with an external ballot box. This tabulator is designed to scan paper ballots, interpret voting marks, and deposit the ballots into the secure ballot box.

Certification Test Results Summary

Accessibility, Usability, and Privacy Testing Summary

An election was run utilizing:

- One DS300 optical ballot counter with ballot container
- One ExpressVote HW2.1 in a kiosk
- One ExpressVote HW2.1 on a table

Three volunteers were used to evaluate each device, each with disabilities ranging from visual impairment to differing levels of fine motor control abilities.

- Volunteer One was blind, but otherwise fully functioning
- Volunteer Two was a Spanish language specialist with no disabilities
- Volunteer Three was blind, but otherwise fully functioning

The sessions were conducted with the volunteers voting on the ES&S devices. When the volunteers arrived, they were given a quick briefing on the testing and the devices. The volunteers then voted using the ExpressVote HW2.1, in either a kiosk or table position, to create a ballot. This ballot was tabulated using the DS300 optical ballot counter. Once testing was completed, each voter completed an Accessibility Test survey for each device.

Volunteer One

ExpressVote HW2.1

Initial Configuration:

- One ExpressVote HW2.1 in a kiosk
- Front approach voting booth in privacy configuration
- One DS300 optical ballot counter with ballot container
- Sitting in a chair
- Using headphones
- Audio on
- Blank Screen Privacy option used
- Keypad used

Observations included:

- Used a ballot style with many write-ins and grew frustrated with the write-in process.

DS300

Initial Configuration:

- Device setup in standard configuration

Observations included:

- No observations of note

Volunteer One Summary

Overall, the volunteer felt satisfied with the voting system and the speech being clear and of sufficient volume. Issues the volunteer had occurred during the write-in process.

The write-in process can feel cumbersome and time-consuming when having to be performed several times and that the audio speed of moving through the alphabet was too slow which only added to the cumbersome feeling.

There was confusion over the audio, giving instructions for a single write-in candidate contest as “First choice, write-in, last choice” as a single sentence.

Additionally, there was confusion over going back a character during write-in as to whether it required pressing the back key or left arrow key.

While reviewing write-ins that were typed in, the volunteer felt having the letters played back individually was confusing.

Volunteer Two

ExpressVote HW2.1

Initial Configuration:

- One ExpressVote HW2.1 in a kiosk
- Front approach voting booth privacy configuration
- One DS300 optical ballot counter with ballot container
- Sitting in a chair
- Using headphones
- Audio on
- Keypad used

Observations included:

- Was a Spanish language specialist with no disabilities.
- Was most concerned with language accuracy
- Maxed out the character input for a write-in
- Thorough use of the display setting options

- Voted two ballots, one to verify Spanish language display and the second to verify the Spanish audio

DS300

Initial Configuration:

- Device setup in standard configuration

Observations included:

- No observations of note

Volunteer Two Summary

Volunteer Two was a member of a Language Access group that wanted to evaluate the Spanish language usage of the ExpressVote HW2.1. The volunteer was advised that the accessibility test was intended to evaluate the system for use by those with varying disabilities and not to evaluate the systems language supporting capabilities. The volunteer found the experience to be an average experience overall. However, the volunteer questioned whether the system could be used independently by those using audio to vote. The volunteer noted that they would prefer to use a paper ballot over the device.

The volunteers primary concern was that counties would not properly pronounce foreign languages. Again, the volunteer was advised that the accessibility test was intended to evaluate the system for use by those with varying disabilities and not to evaluate the systems language supporting capabilities. The volunteer was also advised that verification of the system's ability to meet all State and Federal language requirements was verified during functional testing of the system. Volunteer Two stated that they had a better experience when they were using the accessibility controls with large view options.

Volunteer Three

ExpressVote HW2.1

Initial Configuration:

- One ExpressVote HW2.1 in a kiosk
- Front approach voting booth privacy configuration
- One DS300 optical ballot counter with ballot container
- Sitting in a wheelchair
- Using headphones
- Audio on
- Blank Screen Privacy option used
- Keypad used

Observations included:

- Some minor inconveniences with trying to get the accessibility panel and cord around the privacy wall.
- Asked about settings to change the hardness/softness of the button presses.

DS300

Initial Configuration:

- Device setup in standard configuration

Observations included:

- No observations of note

Volunteer Three Summary

Volunteer Three had an overall good experience with using the voting system. The volunteer liked the speech output and the ease of voting. The only functionality the voter found to be difficult to use was the write-in method.

Additionally, the instructions were unclear as to whether the voter should be pressing the center of the keypad or the other buttons when making selections. The volunteer also found the buttons to be hard to press.

The volunteer also shared concerns that people with mobility issues would have issues with pressing the buttons.

Evaluation of Testing

This section provides summary lists of the issues identified by volunteers during testing and any suggestions provided by the volunteers.

Issues Identified

Issues identified during testing included:

- Write-in process can feel cumbersome and time-consuming when having to be performed several times, and the audio speed of moving through the alphabet was too slow which only added to the cumbersome feeling.
- Confusion over the audio, giving instructions for a single write-in candidate contest as “First choice, write-in, last choice” as a single sentence.
- Confusion over going back a character during write-in as to whether it required pressing the back key or left arrow key.
- While reviewing write-ins that were typed in having the letters played back individually was confusing.

- Concern about being able to use the system independently.

Suggestions

Several suggestions were made by the volunteers during the sessions as follows:

- A volunteer suggested a method of finding what contests were skipped during the ballot review before printing their ballot and the ability to repeat the instructions using a keypad key.
- A volunteer would like the keyboard to navigate utilizing left/right keys instead of the up/down keys.
- A volunteer suggested options to allow a voter to change the sensitivity of the keypad button presses.

Final Considerations

The consensus of the volunteers was that they felt the technologies implemented for accessibility and usability were easy to use, but to varying degrees. All volunteers had one device that they preferred using for various reasons.

As directed by the California Secretary of State, this accessibility, usability, and privacy testing report does not include any recommendation as to whether or not the system should be approved.

End of AUP Test Report